

ployment. The infection is not spread from person to person.

(5) Although primary coccidioidomycosis may occasionally become a progressive disease and acutely disseminate, or, through endogenous reinfection result in chronic dissemination (coccidioidal granuloma), we have not yet in our experience seen either type of spread result from the existence of untreated coccidioidal cavities, regardless of either continued sputum containing the fungus or hemorrhage.

(6) The above is based upon the follow-up observation of 17 cases of coccidioidal cavitation. Full confirmation of these conclusions must necessarily await the study of a larger series of cases.

NOTE: 47 lantern slides were used to illustrate this paper.

REFERENCE

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DISAPPEARANCE OF THE TUBERCULIN REACTION IN CHILDREN UNDER TREATMENT FOR VARIOUS ALLERGIES*

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IN primary tuberculous infection bacillary products escape into the blood stream and produce sensitization of body tissues to bacilli and bacillary proteins. Thereafter the tissues react with inflammation and exudation and other protective effects to each reinoculation of bacilli or bacillary protein (tuberculin).

The inflammatory reaction is termed "allergy," and as found in the skin is the basis of the tuberculin reaction. This is only one portion of a many-phased immunity mechanism. Allergic reactions are somewhat labile, varying under different conditions and at different times. When the tissues have developed a high grade of immunity sensitization decreases, and the allergic response becomes less marked.

In clinical tuberculosis the patient's ability to withstand larger and larger reinoculations with decreased local inflammatory reaction is a necessity if the patient is to live. It is necessary to

understand this variation in allergy in order to interpret properly the tuberculin reaction.

The immunity is an exaggeration of normal physiologic activity. It has been generally believed that although the tuberculin reaction may differ in strength from time to time, it rarely disappears entirely. Should it disappear frequently under any given set of conditions, and should the patient at the same time maintain a satisfactory degree of health during or after its disappearance such conditions would have to be considered as probably favorable to the patient. Inasmuch as the tuberculin reaction also may disappear during the loss of immunity which occurs in an advancing disease preceding death, and under conditions of cachexia, we must understand its disappearance as being both a favorable and an unfavorable sign, according to the conditions under which its disappearance takes place.

A series of forty-two children, some of which suffered from asthma, eczema, and other allergies, and others from low energy and delayed development, is reported in which positive reactions to tuberculin became negative during the time they were being treated with a high protein, high fat, and low carbohydrate diet; regulated exercise; and a potent extract of adrenal cortex.

Since increased permeability of tissues is known to be a factor in allergy, and since there is evidence that a high state of nutrition decreased permeability and also that the adrenal cortex has the same effect, and since the ability of these patients to react to tuberculin was either lost or reduced at the same time they were being improved or relieved of their other allergies, we must conclude that the treatment produced changes in physiologic resistance which lowered the sensitization of the tissues, thus making them less prone to react to tuberculin.

Approximately 36,000 civilians were killed in air-raids in England from June, 1940, to April, 1941. During a comparable ten-month period tuberculosis took 51,000 lives in the United States. Christmas Seal funds are our "home defense" against tuberculosis.

More than three million men, women and children have died of tuberculosis in the United States during the last thirty years. Over two million more would have died during that time if the mortality rate of 30 years ago had continued to prevail.

Tuberculosis killed more Americans in 1940 than were killed in action, or died from wounds received in action, during the First World War. Christmas Seal funds are used to reduce the toll of lives taken by tuberculosis.

The United States is gradually being freed from tuberculosis. In 30 years the death rate has been cut by 75 per cent. Christmas Seals have helped to finance these victories.

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Abstract.

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